

## REMARKS

Claims 23, 25, 26, 29 and 30 are pending in the application. Claims 23, 25, and 26 are allowed. Claims 29 and 30 have been amended to use the transitional phrase "consisting of," thereby placing the claims in better form for consideration. Entry of the amendment is respectfully requested. No new matter is entered by way of amendment. Applicant requests reconsideration of the claims in light of the amendments provided herein.

### Objections to the Specification

#### Drawings

The Examiner has requested correction of the specification with regard to citations to amended Figures 2A and 2B and Figures 3A and 3B.

Applicant directs the Examiner to Applicant's response filed 7 December 2001, which amended page 13 of the specification to make proper reference to the amended drawings. Attached for the Examiner's review as Exhibit A is a copy of the relevant pages of the Amendment and Request for Reconsideration Under 37 CFR 1.116 and supporting documents submitted on 7 December 2001. Supporting documents include the Amendment Transmittal, the return postcard bearing the USPTO stamp showing submission and receipt of the Amendment and Request for Reconsideration Under 37 CFR 1.116, and Annexes 1-21. Exhibit A includes page 1 of the Amendment making changes to the title and description in the specification regarding drawings. The particular amendments to the drawings are shown on page 13 of Annexes 1-21, which is also included in Exhibit A.

In the current communication, Applicant has amended additional sections of the specification to provide correct reference to the amended figures, including Figures 1A and 1B. In view of the prior amendments and those submitted herein, Applicant respectfully requests withdrawal of the objection.

#### Title

The Examiner considers the title of the application inadequate in reflecting the claimed subject matter. Applicant again directs the Examiner to Applicant's response of 7 December 2001, which amended the title to "AN ISOLATED PEPTIDE OR POLYPEPTIDE OF THE EXTRACELLULAR PORTION OF THE HUMAN INTERFERON RECEPTOR (IFN-R)"

as noted above. It is submitted that the revised title sufficiently reflects the nature of the claimed subject matter. Accordingly, Applicant respectfully requests withdrawal of the objection.

#### **Rejections Under 35 U.S.C. § 102(e)**

Claims 29 and 30 stand rejected as being anticipated by Mogenson et al., U.S. Patent No. 5,889,151. Applicant traverses the rejection.

Mogenson discloses an isolated nucleic acid molecule encoding an IFN receptor, which encodes a protein of 557 amino acids. Mogenson, however, does not specify fragments of receptor described in the instant application and their identifying properties, particularly the use of specific fragments for generating neutralizing antibodies.

In contrast, amended claims 29 and 30 identify a peptide or polypeptide consisting of an amino acid sequence from position 1 to 229 or position 27 to 427, respectively, of the IFN-R of SEQ ID NO: 2. The specification describes this region, in one embodiment, as useful for raising neutralizing antibodies against Type I IFNs, such as IFN- $\alpha$ ,  $\beta$  and  $\omega$ . It is submitted that recitation of the larger IFN-R sequence in Mogenson does not anticipate the defined peptides and their associated properties as described in the present application. Accordingly, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 102(e).

#### **CONCLUSION**

Applicant submits that Claims 23, 25, 26, 29 and 30 satisfy all of the statutory requirements for patentability and are in condition for allowance. An early notification of the same is kindly solicited. If upon review, the Examiner feels there are additional outstanding issues, the Examiner is invited to direct any calls in connection with this application to the undersigned at (415) 781-1989.

No fees beyond those included with the Amendment are believed due. However, the Commissioner is authorized to charge any additional required fees, or credit any

USSN: 09/240,675

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overpayment, to Dorsey & Whitney LLP Deposit Account No. 50-2319 (Our Order No. A-72230-1 (455675-00194)/GKS/CYO).

Respectfully submitted,

DORSEY & WHITNEY, LLP

Dated:

17 Nov 2003

By:

Gurjeet K. Sachdeva

Gurjeet K. Sachdeva, Reg. No. 37,434

Filed under 37 C.F.R. § 1.34(a)

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# EXHIBIT A

FOLEY & LARDNER

Docket No: 017283/0123

MR  
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Receipt is hereby acknowledged of the following:

APPLICANT: Patrick BENOIT *et al.*

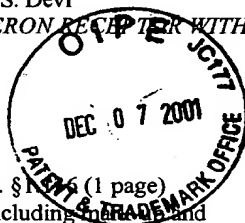
SERIAL NO: 09/240,675

GROUP ART UNIT: 1645

FILING DATE: February 2, 1999

EXAMINER: S. Devi

FOR: MONOCLONAL ANTIBODIES AGAINST THE INTERFERON RECEPTOR WITH  
NEUTRALIZING ACTIVITY AGAINST TYPE I INTERFERON



**Including:**

- Amendment Transmittal (2 pages)
- Petition for One-Month Extension of Time Under 37 C.F.R. § 1.116 (1 page)
- Amendment and Reply Under 37 CFR § 1.116 (8 pages), including ~~marked~~ and clean replacement pages (8 pages)
- Declaration of Julia ANDRAL-ZIURYIS, U.S. Patent Attorney (7 pages)
- Figures 2A, 2B, 3A, and 3B (4 sheets)
- Annexes 1-21 (Bound originals)
- Check No. 17279 in the amount of \$194.00 for Extension of Time.

Date Filed: December 7, 2001

Return to BDS/BGM/mjl

Insp. By. Heasley

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

*In re* patent application of

Patrick BENOIT *et al.*

Group Art Unit: 1645

Serial No. 09/240,675

Examiner: S. Devi

Filed: February 2, 1999

For: MONOCLONAL ANTIBODIES AGAINST THE INTERFERON RECEPTOR  
WITH NEUTRALIZING ACTIVITY AGAINST TYPE I INTERFERON

**AMENDMENT AND REQUEST FOR RECONSIDERATION**  
**UNDER 37 C.F.R. §1.116**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This communication is responsive to the Office Action mailed in the above-captioned case on August 7, 2001.

Petition is hereby made for a one month extension of time up to and including December 7, 2001. A check is attached in full payment of all fees believed to be due in connection with submission of this paper. If the amount is incorrect, however, the Commissioner is authorized to make appropriate charges or credits to Deposit Account No. 19-0741 to provide exact payment.

Reconsideration and reexamination of the application in light of the amendments and remarks herein set forth is respectfully requested.

**IN THE SPECIFICATION:**

Please amend the specification as follows:

On page 1, line 1, delete the present title and add the following:

--AN ISOLATED PEPTIDE OR POLYPEPTIDE OF THE  
EXTRACELLULAR PORTION OF THE HUMAN INTERFERON  
RECEPTOR (IFN-R)--

On page 13, replace the section entitled "**FIGURES**" with the section entitled "**BRIEF DESCRIPTION OF THE DRAWINGS**" submitted herewith.

On page 17, replace the last paragraph with the one submitted herein.

Annexes 1 - 21  
Attorney Docket No. 017283/0123  
Application Serial No. 09/240,675

**[FIGURES] BRIEF DESCRIPTION OF THE DRAWINGS**

-- Figure 1: binding of  $^{125}\text{I}$ -labelled monoclonal antibodies 34F10 and 64G12 to:

-- A: Daudi cells

-- B: Ly28 cells

Briefly,  $10^6$  cells were incubated for 2 hours at  $4^\circ\text{C}$  in presence of different amounts of the labelled antibodies diluted in RPMI medium containing 10% fetal calf serum (FCS). The cells were then washed 4 times in RPMI-1% FCS and counted for bound radioactivity. Nonspecific binding was measured by incubation with a 100 fold [exces] excess of cold antibodies and [substracted] subtracted from total counts.

-- [Figure 2] Figures 2A and 2B: nucleotide and corresponding amino-acid sequence of the extracellular domain of the human IFN-R

The monoclonal antibodies were produced against recombinant soluble forms of the human interferon alpha-beta receptor (IFN-R) synthesized in either procaryotic cells (E.coli) or a mammalian cell system (Cos cell). These soluble forms were based on the DNA sequence described in [figure 2] Figures 2A and 2B.

-- [Figure 3] Figures 3A and 3B: nucleotide and corresponding amino-acid sequence of the human IFN-R.